Results: 1-year follow-up.

Background: The occurrence, correlation and clinical outcome of intra-procedural stent thrombosis (IPST) in patients undergoing primary percutaneous coronary intervention (PCI) in the setting of acute coronary syndromes (ACS) has not been previously described. Sensitivity analysis did not change the results.

Methods: This retrospective study comprised a review of 1901 consecutive ACS patients who received primary PCI in our center during the period of January 2006 to January 2011. IPST was defined as new, reappearing or increased (compared to baseline) thrombus burden at baseline. IPST group compared to no IPST group had 100% more major adverse events on 1-year follow-up.

TCT-466
Clinical impact of the use of thrombus aspiration devices in primary angioplasty. Insights from the multicentric study ESTROFA-MI

Jose De la Torre Hernandez1, Fernando Alfonso2, Victoria Martin Yuste3, Angel Sanchez Recalde4, Manuel Jimenez Navarro5, Armando Perez de Prado6, Hernandez Felipe7, Omar Abdul-Jawad Altschul8, Neus Salvatella8, Tamara Garcia Camarero9, Jaime Elizaga10, Ramon Calvillo10, Jose Moreu11, Francisco Bosa12, Jesus Jimenez Mazuecos13, Jose Ruiz Arroyo14, Bruno Garcia de Blanco15, Jose Ramunoro16, 1Hospital Universitario Marques de Valdecilla, Santander, Spain, 2Clinico San Carlos, Madrid, Madrid, Spain, 3H Clinic Barcelona, Barcelona, Spain, 4H. La Paz, Madrid, Spain, 5H. Virgen de la Victoria, Malaga, Spain, 6HemoLeon, Fundación Investigación Sanitaria en León, Leon, Leon, 712 OCTUBRE, MADRID, NY, 8H. Vall de Hebron, Barcelona, Spain, 9H. de Bellvitge, Barcelona, Spain, 10H. Marques de Valdecilla, Santander, Spain, 11H Gregorio Marañon, Madrid, Spain, 12H. de la Coruña, La Coruña, Spain, 13H Virgen de la Salud, Toledo, Spain, 14H. Clínico de Tenerife, Santa Cruz de Tenerife, Spain, 15H de Albacete, Albacete, Spain, 16H Luzano Blesa, Zaragoza, Spain, 17H Vall de Hebron, Barcelona, Spain, 18Hospital de Galdakao, Bilbao, Spain

Background: Primary angioplasty is the best reperfusion strategy in ST elevation myocardial infarction (STEMI). Thrombus aspiration with different devices might elevate a clinical benefit following the results of the TAPAS study although findings from the recent INFUSE-AMI trial questions this statement. We sought to analyze the clinical impact of the use of aspiration devices.

Methods: From a retrospective multicenter (16 hospitals) study that compared different drug-eluting stents in the STEMI setting we have analyzed the clinical impact of the use of thrombectomy. Patients were consecutively included. Demographic and clinical data were collected and a systematic follow up was performed.

Results: A total of 734 patients were included. A thrombectomy device was used in 211 patients (29%). After two years follow up the survival free from death and myocardial infarction (MI) was 95% in the group with thrombectomy vs. 87.2% in the group without device (p=0.001) and the survival free from death, MI and TLR was 93% and 84.6% respectively (p=0.002). Definite plus probable thrombosis incidence was 1% in the group with thrombectomy and 3.2% in the group without device (p=0.009). Thrombectomy turned out to be an independent predictor of both death and MI (HR 0.2 95% 0.08-0.6; p=0.002) as well as an independent predictor of the combined end point of death, MI and TLR (HR 0.4 95% 0.2-0.8; p=0.02) in a Cox regression analysis. This benefit was independent of the type of stent used.

Conclusions: The results of this multicenter retrospective registry show that the use of thrombus aspiration devices in the primary angioplasty with DES is associated to better clinical outcomes.